

**Title: INTEGRATED SYSTEM FOR QUICKLY AND ACCURATELY  
IMAGING AND MODELING THREE DIMENSIONAL OBJECTS**

**Abstract**

5           An integrated system generates a model of a three-dimensional object.  
A scanning laser device scans the three-dimensional object and generates a  
point cloud. The points of the point cloud each indicate a location of a  
corresponding point on a surface of the object. A first model is generated,  
responsive to the point cloud, that generates a first model representing  
10           constituent geometric shapes of the object. A data file is generated, responsive  
to the first model, that can be inputted to a computer-aided design system.